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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/852,292	05/10/2001	Alexander Knoll	420/49867	3804

7590 06/28/2006

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EXAMINER

ABDULSELAM, ABBAS I

ART UNIT	PAPER NUMBER
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2629

DATE MAILED: 06/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/852,292

Applicant(s)

KNOLL, ALEXANDER

Examiner

Abbas I. Abdulsalam

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>02/13/04, 10/23/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In view of the petition granted to revive the abandoned application, the following non-final action is reissued.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1-10 rejected under 35 U.S.C. 103(a) as being unpatentable over Schmitt (USPN 6173220).

Regarding claim 1, Schmitt teaches a flight control display and instrument one of which is an attitude direction indicator (ADI). Schmitt teaches that that ADI indicates a reference point or line such as a representative horizon line relative to the position of the aircraft. Schmitt also teaches that the aircraft may be represented by a fixed element of ADI display depicting the aircraft wings as one or more horizontal marks that are centered with respect to the display screen. See col. 1, lines 10-23. Schmitt teaches a display element (200) including the center of a display to which a pilot's attention is drawn using window areas (214). See col. 5, lines 28-31 and Fig 2. Furthermore, Schmitt teaches a first image portion (206), representing the sky that defined by the area above horizon line (204) that may rotate in response to changes in roll of the aircraft. See col. 4, lines 39-44, 66-67 and col. 5, lines 1-10.

However, Schmitt does not specifically mention “an aircraft symbol with a center to depict a longitudinal axis and a lateral line to depict a current attitude of the aircraft”. Schmitt also does not specifically disclose destination position symbol, its location, and alignment with “reference line” as well as “skyline”.

On the other hand, Schmitt teaches a detection element (106) configured to determine the position/attitude of the aircraft including the pitch of the aircraft relative to a reference (e.g. horizon), and the roll of the aircraft relative to its longitudinal axis, Schmitt further indicates the use of a processor (102) which may be configured in a desired fashion to receive and process target and/or bearing data (108) to an intended destination of the aircraft. Schmitt indicates that the data (108) could be specific landing coordinates, a runway etc. See col. 3, lines 49-67, col. 4, lines 1-11 and Fig 1.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to utilize Schmitt’s detection element (106) and processor (102) for the purpose of position determination with respect to one or more locations, points, planes and targets as taught by Schmitt.

Regarding claims 2-3, Schmitt teaches directional markers (402) which identify toward a suitable reference altitude. See col. 7, Lines 5-8.

Regarding claims 4-7, Schmitt teaches a processor (102) which process data (108) related to destination position, coordinates and other destination-related details. Col. 4, lines 1-11.

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Regarding claims 8-10, Schmitt teaches the use of a variety flight control displays including head up display (HUD), and Liquid crystal display. See col. 1, lines 10-14 and col. 2, lines 61-67.

Conclusion

3. The prior art made of record and not relied upon is considered to applicant's disclosure.

The following arts are cited for further reference.

U.S. Pat, No. 5,343,395 to Watts

U.S. Pat. No. 5,388,990 to Beckman

U.S. Pat. No. 5,745,073 to Tomita

U.S. Pat. No. 6,150,960 Voulgaris

U.S. Pat. NO. 6,389,333 Hansman

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abbas I. Abdulsalam whose telephone number is 571-272-7685. The examiner can normally be reached on Monday through Friday from 9:00A.M. to 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Abbas Abdulsalam

Examiner

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June 20, 2006

A handwritten signature in black ink, appearing to read 'R. Hjerpe', is positioned above the printed name and title.

RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600